

In the Specification:

Please add the following new paragraph after **Page 10, line 4:**

Fig. 17 is a simplified block diagram illustrating an embodiment according to the present invention.

Please add the following new paragraph after **Page 29 line 28:**

Reference is now made to Fig. 17 which is a simplified block diagram illustrating a quadrature polarized antenna array 170 connected to a signal preprocessor 172. The signal preprocessor comprises a sensor type autocorrelator 174 which produces a signal autocorrelation matrix 176 per sensor type. The signal autocorrelation matrices are passed to a smoother 178 where they are smoothed to form covariance matrices 180 which have spatial spectral information. A source locator 182 uses the covariance matrix to find the source location, optionally with the help of a steering vector 184.